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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

COOLEY, CHARLES E

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/668,996	Applicant(s) BAUMANN, DIETER	
	Examiner Charles E. Cooley	Art Unit 1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 12, 13, 18, 19, 21-24 and 26-29 is/are rejected.
- 7) ☒ Claim(s) 6-11, 14-17, 20 and 25 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09232003</u> . | 6) <input type="checkbox"/> Other: ____. |

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NON-FINAL OFFICE ACTION

1. This application has been assigned to Technology Center 1700, Art Unit 1723 and the following will apply for this application:

Please direct all written correspondence with the correct application serial number for this application to Art Unit 1723.

Telephone inquiries regarding this application should be directed to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 or to the Examiner at (571) 272-1139. All official facsimiles should be transmitted to (703) 872-9306.

2. As the PTO continues to move towards a fully electronic environment, the office will phase-in its E-Patent Reference program. This program: (1) provides downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions via the E-Patent Reference feature of the Office's PAIR system; and (2) ceases mailing paper copies of U.S. patents and U.S. patent application publications with office actions except for citations made during the international stage of an international application under PCT.

Effective June 2004, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions from this Technology Center. Paper copies of foreign patents and non-patent literature will continue to be included with office actions.

The U.S. patents and patent application publications cited in office actions are available for download via the Office's PAIR system. As an alternate source, all U.S.

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patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources.

Inquiries about the use of the Office's PAIR system should be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

Requests to restart a period for response due to a missing U.S. patent or patent application publications will not be granted.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119, which papers have been placed of record in the file.

Information Disclosure Statement

4. Note the attached PTO-1449 form(s) submitted with the Information Disclosure Statement filed 23 SEP 2003.

Specification

5. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
6. The abstract is acceptable.
7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed (MPEP 606.01).

Claim Objections

8. Claims 24-25 are objected to because:
- a. Claim 24, line 1: it appears "wall search" should be --walls each--.
 - b. Claim 25, line 1: replace "claims" with --claim--.

Correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-5, 18-19, 21-22, and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hallgren et al. (US 6,183,407).

The patent to Hallgren et al. discloses a rotor for a centrifuge for the separation of solid particles from a fluid, with a rotor housing 1, 5 defining an interior region that is routable about a central rotational axis and cylindrical in its basic shape, wherein said rotor housing comprises a fluid inlet 2 or 4, a fluid outlet with at least one propulsion nozzle 27 for driving the rotor by means of the fluid flowing through it, and walls that are provided in and partition the interior region of the rotor, comprising, several wall pairs 12 (Figs. 1-2) or 12a, 12b (Figs. 3-5) spaced apart from each other in a circumferential direction provided in the interior rotor region, comprising walls that are also spaced apart from each other in a circumferential direction and enclose between them a space

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having the approximate shape of a gap, with said space radially extending in an outward direction from a central area that is connected to the fluid inlet and ending within a small fraction of a radius of the rotor housing from a circumferential wall of the rotor housing, thus permitting fluid to enter into the remaining interior rotor region as seen in the Figures; wherein the walls forming the wall pairs extend along planes that are arranged parallel to the rotational axis and extend in a substantially radially outward direction as seen in the Figures; wherein the spaces having the shape of a gap form a rotationally symmetric star shape having multiple arms, as seen from a cross-sectional view of the rotor perpendicular to the rotational axis (Figs. 2, 4, and 5); wherein the walls of each wall pair are each aligned in parallel with one another in a radially outward direction as seen in the Figures; wherein the walls of each wall pair diverge in a radially outward direction (Figs. 2, 4, and 5); wherein said rotor comprises a central tube 3 extending concentrically with said rotational axis, wherein said central tube is provided as a fluid inlet to the interior rotor region and is in fluid communication with the spaces respectively enclosed by the wall pairs via apertures 23; wherein a fluid channel 24 is formed inside a lower area of each space, which extends from the apertures into a radially central to outer area of each space; wherein a diameter of the rotor exceeds a height of the rotor (Fig. 1). Hallgren et al. also teaches that the elements of the rotor may be formed of plastics (col. 5, lines 18-20) and formed as an insert (col. 41-60).

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11. Claims 1-5, 12, 13, 18-19, 21, 23, 24, 26, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Tait et al. (US 2,755,992).

The patent to Tait et al. discloses a rotor for a centrifuge for the separation of solid particles from a fluid, with a rotor housing 1 defining an interior region that is routable about a central rotational axis and cylindrical in its basic shape, wherein said rotor housing comprises a fluid inlet 5, a fluid outlet with at least one propulsion nozzle 12 for driving the rotor by means of the fluid flowing through it, and walls that are provided in and partition the interior region of the rotor, comprising, several wall pairs 6 or 9 (Figs. 1-9) spaced apart from each other in a circumferential direction provided in the interior rotor region, comprising walls that are also spaced apart from each other in a circumferential direction and enclose between them a space having the approximate shape of a gap, with said space radially extending in an outward direction from a central area that is connected to the fluid inlet and ending within a small fraction of a radius of the rotor housing from a circumferential wall of the rotor housing, thus permitting fluid to enter into the remaining interior rotor region as seen in the Figures; wherein the walls forming the wall pairs extend along planes that are arranged parallel to the rotational axis and extend in a substantially radially outward direction as seen in the Figures; wherein the spaces having the shape of a gap form a rotationally symmetric star shape having multiple arms, as seen from a cross-sectional view of the rotor perpendicular to the rotational axis (Figs. 2, 4, and 5); wherein one wall of each wall pair each extends to an internal perimeter of the circumferential wall of the rotor housing (Figs. 8-9); wherein the rotor is arranged to rotate in a first direction about the rotational axis,

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and the one wall extending to the internal perimeter of the circumferential wall of the rotor housing is the one wall 6 or 9 of each pair that is positioned in the direction of rotation of the rotor relative to the other wall of the pair; wherein the walls of each wall pair are each aligned in parallel with one another in a radially outward direction (Figures 1-9); wherein the walls of each wall pair diverge in a radially outward direction (Figures 1-9); wherein said rotor comprises a central tube 5 extending concentrically with said rotational axis, wherein said central tube is provided as a fluid inlet to the interior rotor region and is in fluid communication with the spaces respectively enclosed by the wall pairs via apertures 13; wherein the wall pairs, as viewed in the direction of the axis of the rotor, each extend across at least half of the rotor's axial internal height and, at the most, across the rotor's total axial internal height (Figs. 1, 4, and 7); wherein a plurality of intermediate walls 8 or 10 each extend in a substantially circumferential direction and end at a distance from an inner side of an upper wall of the rotor housing and are each arranged between two walls of two neighboring wall pairs, wherein said two walls face each other, and said intermediate walls, together with the walls of the wall pairs, form radially inward positioned channels that run to the fluid outlet in the direction of the rotational axis of the rotor (Figs. 4-6); wherein a diameter of the rotor exceeds a height of the rotor (Figs. 1, 4, and 7); wherein the rotor housing consists of only one lower housing part, only one interior housing part and only one upper housing part and the walls of the several wall pairs are at least partially formed integrally with one of the lower housing part, the interior housing part and the upper housing part (col. 3, lines 29-42).

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Furthermore, the product-by-process limitation of claim 29 (i.e., the manner in which the rotor is formed, i.e., by injection molding) does not impart patentability to the claims per MPEP 2113.

Allowable Subject Matter

12. Claims 6-11, 14-17, 20, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Charles" followed by a stylized flourish.

Charles E. Cooley
Primary Examiner
Art Unit 1723

9 June 2005